WASHINGTON: SATURDAY, OCTOBER 28, 1854.

THE WEEKLY NATIONAL INTELLIGENCER.

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or more copies.

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MONDAY, OCTOBER 23, 1854.

RETROSPECTIVE.

More immediate claims on our attention prevented instant notice of a consumble article which appeared in the Union of the 19th of the month, respecting the acquisition of Cuba. Whether it is by way of relief, under the distress of the received instant notice of a consumble article which appeared in the Union of the 19th of the month, respecting the acquisition of Cuba. Whether it is by way of relief, under the distress of the received in the Union has just now revived this somewhat obsolete hope of the Democracy, as a sub threwn to the valle, the act is equally reprehensible. The President, in the honor, and seem to be reliquishing their forces and seem to be reliquishing their forces and seem to be reliquishing their reference on the island, the Government paper comes for ward to inspire the hope of getting it by other on the island, the Government paper comes forward to inspire the hope of getting it by other combination of factions that history has ecombination of factions that history has ever exhibited, combining the poor of the page on the island, the Government paper comes forward to inspire the hope of getting it by other combination of the hope of getting it by other combination of the shall that has a warded the most unprinciple of the inspired the hope of getting it by other combination of factions that history has every and to inspire the hope of getting it by other combination of factions that history has every and to inspire the hope of getting it by other combination of factions that history has every and the inspire the hope of getting it by other combination of factions that history has every and the page of the properties of contract and the native over and the page of the pag

that country we did not suppose that much progress could be made towards the settlement of the interesting questions pending between the two Governments. We recur to it now ecause we see indications in our late intelligence from Europe which satisfy us that our Minister to Spain has neither abated his exertions nor despaired of succeeding in a satisfactory result. * * * In connexion with this subject we have a private letter from a reliable friend in Paris, from which we take the liberty of using the following interesting extracts:

"PARIS, OCTOBER 2, 1854. " Mr. Soule is here, and has never been in better spirits

since he left the United States.

"The entente cordiale [between France and England] will not now be of long duration. The division of honors and of property will engender heart-burnings which may eventuate in hostile feelings. I think that neither Power, even as matters now stand, would dream of a physical resistance to our acquisition of Cuba by purchase. The people of both countries are decidedly with us, as they were against the Czar. since he left the United States. re against the Czar.

Spain must choose between the purse and the swore

confidence in its prognostications, the Union is well Denunciation of the people as "factions," even We were not precisely in reverie, but rather permitting thought of ceding her great American colony to this Government at any price. Mr. Soule, we doubt not, could have told the Union better. He knows as all intelligent men have long known, that Spain would repel as an insult even the official presenta tion of a proposition from us to purchase Cuba. And then the good taste of the alternative which the official journal presents to Spain, of "the purse or the sword!" Saying to an old and proud Government, "we covet your rich island, and if you refuse to sell "we covet your rich island, and if you refuse to sell it we will fillibuster on a large scale and take it; so make your election and sell or surrender." Really "This is one of the most magnificent bays and harbor in the world, and capable of holding all the fleets in the we regret to see the respectability of the Administration compromised by announcements so idle, and as discreditable to public morals as they are idle. If Spain were feeble enough to be addressed in such a way, the good sense and generous impulses of the American people would reject so unworthy and insulting a proffer, and low indeed must a nation have fallen that would not, under such an indignity,

We are happy to learn that the Cunarders have ordered and taken out large bells, which will be rung in the fogs, and that the steam-whistle will hereafter be freely used in all the vessels of the Collins line. They have not been used hitherto be-cause they involved a loss of steam power; but the loss will be incurred now without regard to the expense or waste of power.

choose the sword rather than the purse. The deli-

cacy, too, of the official journal in predicting a speedy

Powers, and their hoped-for "hostile feelings!"

ENCOURAGEMENT FOR THE DESPONDING .- The Detroit Free Press represents the prospects of the Democracy in Michigan as very encouraging. So were the prospects in Ohio, Indiana, and Pennsylvania less than a month since. Time often brings sad realities to spoil the "pleasures of hope" and dissipate the bright fancies of the imagination. Our charitable nature would almost induce us to wish our Democratic friends an oasis in the desert, by way of offset to the dark sterilities which have lately afflicted their vision.

The Treaty with Dominica, lately concluded by Commissioner from our Government, it is said prowides for the full recognition of Dominica by the American Government; that Americans are to be allowed to hold and cultivate land and work mines in that country without being required to become

The New York Express, in referring to the course of several Southern Whig journals, says:

"The Southern Whigs, in the main, have cut loose from us Northern Whigs, and left us to the tender mercies of the Abolitionists, whose mercies would not be very sparing, if we could not take care of ourselves. The So ern Democrats invite the Southern Whigs, we see now, to come into their Democratic ranks, in order to have in the North better company than we Northern Whigs are accept the invitation, they will only realize the proverb, by ' jumping from the frying pan into the fire."

THE LATE ELECTIONS.

There is so wide a diversity of opinion among party papers in regard to the political character of the recent elections, so disastrous to some party or other, (perhaps the Union can tell us which,) that we think it right to give our readers the interpretations furnished by the organs of all. So we subjoin that of the Secession organ of South Carolina.

FROM THE CHARLESTON MERCURY OF OCTOBER 17. THE ELECTIONS .- We have returns enough from Penn sylvania, Ohio, and Indiana to show that in those States the Democratic party has been defeated by great majori-

being, have been able to coalesce, and that a sudden and astounding success has rewarded the most unprincipled combination of factions that history has ever exhibited. But this combination has no recognised leaders, no acknowledges. The article to which we allude is the following:

| The Authors with Spain. —We have refrained of late from adverting to the present aspect of our relations with Spain. For the reason that in the existing state of affairs in hear to the integrity even of this combination. But the distovery has spain, for the reason that in the existing state of affairs in hear to the desire of calculations and that a sudden and astounding success has rewarded the most unprincipled astounding success has rewarded the most unprinc been made that by nominating a set of candidates who can court all the many-sided weaknesses of the people; who can burn incense before all the idols of the day; who can swallow all the pledges that voters choose to present; who can counterfeit every popular passion and grimace responsive to every prejudice of the mob, there is a certainty of temporary success, and this discovery is showed no symptom of physical disturbance; his placid not likely to lie unimproved on the waste of political life.

We shall next have a candidate for the Presidency who have a candidate We shall next have a candidate for the Presidency who will represent, as the Governors of Maine and Pennsylvania now do, the Wbigs, the anti-Catholics, the Native Americans, the Abolitionists, the Freesoilers, the Maine-Law folks, and perhaps the Spirit-rappers, Mormons, and ways retarded in growth, is often marred in symmetry Millerites. Then, hurrah for the Union!

claims the overwhelming routs in the States menis spain must choose between the purse and the sword. If she rejects the former, she must be distinctly informed that the safety of the Union will comple us to employ the latter. The public mind should be familiarized to the latter. The public mind should be familiarized to the adage upon which we shall have to act, that 'self-preservation is nature's first law.' We can well afford to inscribe it on our flag."

The official journal should not trifle with the character of the Government or the public feeling as o grave a matter. "A reliable source!" Such nonsense as this from a source which the official paper of our Government calls "reliable!" If the absolute silliness of the letter had not forbidden all absolute silliness of the letter had not forbidden all provinciation of the people as "factions." even claims the overwhelming routs in the States men- dowments

utter futility of the idea that Spain entertains a gracious on the part of those who have been so long sustained by ad captandum appeals.

THE JAPAN EXPEDITION.

A correspondent of the New Bedford Mercur writing from Canton under date of August 14th speaking of the late Japan treaty, says : "After the conclusion of the treaty and interchi of hospitality the squadron sailed for Simoda, one of t two ports opened to the citizens of the United States.

"A careful survey of the harbor of Simoda bein made, and most of the stipulations of the treaty bein

Pacific in security.
"The Commodore's object in visiting Hakodadi was the same as at Simoda. In addition to the survey of the harbor, however, a vessel was sent to examine 'Volcane Bay,' another to the Island of Fatsisio, which is the pena

colony of Japan for political offenders, and another the Japan Sea to Shanghai. "The mountains in the vicinity of Hakodadi about with bears, deer, and small game, and the bay furnishes delicious salmon and shell fish in the greatest abundance. "Hakodadi is the second city in size of the island of resso, and probably the first in commerce. Junks in great numbers were constantly arriving and departing whilst the squadron was there, and at no time were there less than one hundred at anchor in the port; yet the authorities said their numbers were always greatly increasdissolution of the present alliance of two friendly

ed during the summer months.
"On the return of the squadron to Simoda, the Commissioners were already there awaiting the arrival of the Commodore. The place had become an imperial city, and the Prince of Mimasaki and the Prince of Suruga

been appointed its governors.
"The good feeling which had subsisted between the Americans and Japanese since the arrival of the squadron seemed to be increased by a more intimate acquaintance, and the squadron sailed on the 25th June with the best wishes of the commissioners and inhabitants, and expressions of a hope of soon seeing ther again in Japan.

again in Japan.

"Stopping at Loo Choo for a short time, the Commodore and Regent of the Island established some regulations for the benefit and protection of American vessels touching at the ports of the kingdom. "The squadron left Loo Choo on the 17th June and ar rived at Hong Kong July 22d."

FINANCIAL CRISIS AT CINCINNATI.—The Cin

cinnati Gazette of Thursday morning says : "All day yesterday Third street, which is the Wal "All day yesterday Third street, which is the Wall street of Cincinnati, was more than ordinarily crowded by people, the occasion of which was a distrust felt by many depositors of some of the banking houses as to their solvency. The small depositors, most of whom are among our German citizens, were chiefly active. The banking house of P. B. Manchester, which was one of the houses run upon, and around which a large crowd was gathered, stopped payment. We regret also to learn that B. F. Sanford & Co., who are connected with the Kentucky Trust Company Bank, which failed yesterday, also stopped payment.

stopped payment.
"There is a feverish state of feeling in the city in re "There is a leverish state of feeling in the city in regard to several of our banking houses. We hope the distrust which now exists may be temporary, and that our bankers may be able to meet all the calls which are made upon them. Our currency, through a vicious system of legislation, is in a disorganized and miserable condition, and many worthy men have suffered in consequence, and will continue to suffer until we have a radical and thorough change."

Press learns from a private source that the cholera has again appeared in Martineburg, (Va.) Mr. Washington Kroesen and three negroes died on Wednesday morning. Besides, there were several persons very ill.

CORINNE AT HOME-A REMINISCENCE OF 1816.

given us a note of introduction to Madame DE STARL, and we set out in a voiture de place we had engaged for the occasion to visit her at Copét, some nine or ten miles from town. My companions were the very opposites of each other—a free and easy, unpolished though talented Virginian, a reserved, elegant, and accomplished lordling. Both were young, neither having yet arrived at man's estate; but how different in every particular of manner,

all its wild conceits standing out in bold relief, and exulting in independence which set form at defiance and scorned its trammels. To the air, tone, and manner of the Eng-

and grace, and not unfrequently distorted to uselessness Where be these results of different nurture now? Mark Now, with all due deference, we think the Whigs have been sufficiently modest on this subject. We read many Whig papers in the course of a day, and yet we can scarcely remember one of them which

reserve for them, or indulging in such anticipations as were natural to the occasion, until the carriage stopped, at noon, in time for breakfast, at the gates of the chateau, were natural to the occasion, until the carriage stopped, at noon, in time for breakfast, at the gates of the chateau, and we were ushered into the drawing-room, where we found a large company assembled awaiting its announcement. Among these were Schlegel; Moroseni, author of a work on the peninsular war, in which he had been engaged, and from which he had brought many a token in sabre cuts which disfigured his fine face and person; Mr., now Lord, Brougham; Monsieur Auguste de Stael, son to Madame; her lovely, piquante, and spirituelle daughter, the Dutchess de Broglie; Monsieur le Duc, her liege lord; and Monsieur de Rocco, l'ami de la famille. In this bright galaxy appeared the genius of the place, Madame la Baronne, redolent of intellect, animated, voluble, charming; a Corinne if you closed your eyes and received your impression of her through the hearing. If you opened them the illusion vanished, for the individual who gave utterance to sounds and sentiments so engaging was insignificant in person, common-place in feature, and tawdry in apparel; below even mediocrity in all the external requisites of female attractiveness, though it was evident an undue portion of her sex's imputed foible had taught her to think otherwise.

She received us with great cordiality, and began immediately to express her regard for Americans, her grating the fact the favor her writings had received from them.

She received us with great cordiality, and began immediately to express her regard for Americans, her gratiude for the favor her writings had received from them, and, above all, her delight at a recent letter from Mr. Jefferson, (which she read to us,) "so full," she remarked, "of good sense and agreeable compliment that she was determined to have it printed on satin and framed, to be hung up in her boudoir." "But," she continued, "I have just had the most flattering tribute to my exertions ever yet conferred on them. My bust, they tell me, is to be placed in one of your academies of arts and sciences, the only representative of a purely literary character deemed worthy of a niche among the savans of the age—a compliment," she added, with great apparent exultation, "that cannot be enhanced."

"Pardon me, Madame la Baronne," I replied, "I can tation, "that cannot be enhanced."
"Pardon me, Madame la Baronne," I replied, "I ca

"No. monsieur," she exclaimed with vehemence, "c'es

I then mentioned, what was really fact, that I had late-I then mentioned, what was really fact, that I had lately seen at Bartolini's, the sculptor, in Florence, her bust in marble preparing for this purpose, that she might be commemorated in stone, while science and philosophy figured in plaster; asking her to determine whether this was to be attributed to the gallantry of my countrymen, as evincing their respect for the woman, or to their good judgment which prompted it as homage to talent?

"If the matter be referred to me, madame," I continued. "I shall certainly on this occasion give them cre-

tinued, "I shall certainly on this occasion give them credit for both, in perfect confidence of truly representing their intentions."

It is needless to describe the effect of this fortunate hit upon one to whom the devotion of heart and eyes was quite as desirable as the applause of the taste and understanding, and the myrtle wreath as precious as the laurel crown, or to add that I was ever after a welcome

guest at Copét.

Breakfast being announced, we proceeded to do justice to the good things set before us, while such general conversation prevailed as keen appetites permitted us to engage in. As the meal drew to a close, I observed a servent being on a small salvar of silvar a twin of polar gage in. As the meal drew to a close, I observed a servant bring on a small salver of silver a twig of poplar, with a few of its leaves remaining on the extremity of it, which he deposited on the table at the right hand of the Baroness. To my inquiry of the Duke de Broglie, who sat next to me, as to the object of this, he replied that it was her wand, and as essential to her conversation as her tongue. "When she takes it up," he said, "and begins to twirl it on her fingers it is a signal that she is possessed of her subject and prepared to body it forth." And so it proved. In a very few minutes the twig was in motion as an accompaniment to the organ of speech, indicating by the languor or activity of its gyrations the part the speaker's feelings had in her discourse.

The turn was given to the conversation by my asking

the speaker's feelings had in her discourse.

The turn was given to the conversation by my aski
Madame de Stael, who had been speaking of Napolewhat she would have desired to have been his fate?

brilliant career was essential to the page of history, while his death was need sary to the peace of Europe."

She then launched forth in his praise, for his downfall had carried with it all her animosities, "and she could not," she said, "deay him the title of greatness beyond that to which any mortal had attained; of genius so far surpassing that of oher uses that his was the only head (la scale tête) in his lample, though, of necessity, he employed the limbs of there is execute his magnificent designs."

She became enthu astic on this subject, and, turning to a gentleman present lately arrived from Paris, asked, "Why he had not up ted the white riband to the red of the legion of honor h were at his button-hole, in con formity with a recent equisition of the existing Govern-

ent!"
"I have them both about me, madame, was his reply,

GENTLEMEN: The following " Bit from my Note-Book ay be not without interest to some of your readers. I has been called forth from my Note-Book, I mean) by Mr. MILLS'S speculations upon the origin of the Deluge. published in your last weekly isue :

The nucleus of our planet in a state of igneou

pinion so well founded that it is allowed to pass for ne of the facts in physics. Then, what might have been he cause, or causes, of the state? The only answer which I have seen is that which may be gathered from such as follows :

" Although at the surfice the temperature of the earth is solely dependant upon the radiating power of the sun, yet it is found that it datains within itself a source of heat which, in ages occessively remote, must have re-tained the general mass of all the constituents of the

mineral globe in ignees liquefaction." (American Edition of Kane's Elemens of Chemistry, page 105.)

And, "1st. The oficinal and general fluidity of the mass of our planet appears to be demonstrated by its form as a spheroid offortation. 2d. The increasing temperature at increasing depths below the earth's surface to protrude streams and dykes of cruptive granitoid lava from the great central reservoir." ("Geology of Russia," in the London Quarterly Review for March, 1846.)

My hypothesis: The Sun is a burning body, from which has sprung the matter which composes the Earth. a nucleus collected, which nucleus continued to gather to Earth, with form and not void-the Earth, a spheroid of rotation, with its diversified surface and its multitudinous

rst molecules in the fashioning of the nucleus. articularly in the direction of the motion out of which grew this rotation—that is, from the centre towards the equator, rather than towards the poles; hence a spheroid stead of a sphere.

As the process of formation went on, new actions and arrangements to the gas particles, thereby causing the diversity in form, color, and quality of the materials com-

getable and animal organisms became at length deeloped-vegetables with their power of growth and lia-

her beauty and life and gladness. The same Sun will be pon the surface, is transmitted inward in virtue of the nducting power of the ground; and thus, each summer thin layer of elevated temperature moves inward, Kane's Chemistry, page 106;) which heat, accumulating t the centre, has resulted in the igneous liquefaction of our nucleus, and which will result ultimately in the melting of the elements, and in the passing away of the Earth as G. W. EVELETH.

The Virginia Presbyterian Synod (old school) is now a session at Alexandria, largely attended by clergy and

BRITISH SCIENTIFIC ASSOCIATION.

We make some further extracts from the proceedings of the last meeting of the British Scientific Association held at the close of last month :

Non-Russian Populations of Russia.- A paper com Non-Russian Populations of Russia.—A paper communicated by Dr. Lathan to the Ethnological Section contained the following remarks: Certain portions of the heterogeneous population of European Russia consist, he observed, first, of colonists or new settlers; secondly, of the frontier population; and, finally, of the fundamental and original population of the great Russian Empire. In the first division are to be found Jews, who number upwards of one million and are spread over the different Governments of European Russia, exclusive of Finland and Poland. Then come the Germans, amounting to about five hundred thousand, and their distribution is wider even than that of the Jews, as they are to be found in every one of the Russian Governments. In the Gov-

first and most important of these are the Romanios, so called because the language they speak bears that name. Politically speaking, they comprise Wallachiaus, Moldavians, and Bessarabians, together with a great portion of the population of Transylvania.

Having observed that the principal characteristic of the people comprised under the head of Romanios was their language, the lecturer remarked that the remainder, or the third division of the non-Russian population of European Russia of which he would speak, would be referable to one of the three great families of the human race—to that which ethnologists call Ugnan, but which men at large call Fin, a race akin to the Finlanders. The type of this division is to be found in the north, in the Grand Duchy of Finland; of the Turkish division the type is to be found in Independent Tartary; and the type of the third division is to be found in the parts between the Baltic and the Black Ses—in Lithuania, Poland, Galthe Baltic and the Black Sea—in Lithuania, Poland, Gal-licia, Seryia, &c. One is south and westward, one cen-tral and eastward, and one northern and eastward. From these positions the lecturer showed on the map the course which each division took in its emigration, and so illus-trated the ethnological axiom, that the fate of the northern population, when pressed on two sides, is the fate of the iron between the anvil and the hammer. Here the Fin was the iron, and his wide distribution over the country, far more than the researches of history, proved the truth of the axiom. In the Government of St. Petersburgh the Fins are to be found, and again in those of Archangel and Novogorod. In Livonia, Esthonia, and Courland, on the frontier of Prussia, a Finnish population is to be found, but in an eminently fragmentary form. In Courland they are called "Lives," showing that they at one time entered Livonia and constituted its populated. In Archangel the original population of Fins are to be found, and there are also there two outlying branches turer particularized several other parts of Russia in which the Fins are to be found, and in conclusion observed that he believed their original displacement began from the Turks of the East, who again were followed by the Sclaouthwest to northeast.

The CHAIRMAN complimented Dr. Latham on the ability and research displayed in his paper, and asked him what might be the amount of the non-Russian population

THE KOH-I-NOOR DIAMOND.—In the Chemical Section, Prof. TENNANT offered some very interesting remarks on the re-cutting of the Koh-i-noor diamond. The learned professor stated that at the Great Exhibition in 1851 an Now, granting it to be according to a predetermined law of Nature that a ball of fire, of the dimensions indicated, all at once starts whirling in its orbit, and questioning not at all the legitimacy of the agents which are to bring about the cooling, what is going to be the result of the matter? The refrigeration that was then going on its going on still, and will continue to go on towards the centre, till our poor planet shall have frozen completely up, sealed as solids at the Book of Fate.

And, afterward, how is coming to pass that event in expectation of which the whole world is waiting—the configuration spoken of in Scripture? To be sure, it is in the power of Him who has created the universe to call into existence means sufficient for this end, means which all be expressly for the accomplishment of the Majesty's jewellers. The stone per broad the the mast up the order of things—that the "flery overthrow" whall come through the instrumentality of electricity, [Dick,] or through that of a comet, placed in ambush upon the path of the unwary Earth, to rob her of her aritrogen [Poc.] But the Creator has not to resort to expedients for the carrying out of his plans. He works by a rule. There has not been, and there will not be, a movement in the machinery of the universe that had not its spring set in the beginning.

My hypothesis: The Sun is a burning body, from which has spring the matter which composes the Earth, its illustration and the matter of the commondation of the court of the plans. He works by a rule. There has not been, and there will not be, a movement in the machinery of the universe that had not its spring set in the beginning.

My hypothesis: The Sun is a burning body, from which has spring the matter which composes the Earth, its illustration and the strength and the proposes to the correct the proposes to the commondation of the plans. He works by a rule. There has not been, and there will not be, a movement in the machinery of the nuiverse that had not its spring set in the beginning.

My h this diamond sent to them for inspection in the East In-dies, and Miss Eden's drawings agreed with the appear-guard at the extremity or other part of the train to com-

it from its source, and which may be likened to that now ting it, so as to bring out its best qualities. In the account of this diamond by M. Trivernier, published in a nucleus collected, which nucleus continued to gather to count of this diamond by M. Trivernier, published in 1676, he stated the weight of the diamond to be 7874 carats. Dr. Beek, of Ipswich, had published an account of a fragment of this diamond, now in Persia, which corresponded with the diamond when it arrived in England; for it first appeared as a white topaz, being so roughly cut. In 1852 he (Prof. Tennant) had given in a report as to the cutting of the Koh-i-noor diamond, and after producing various models her Majesty fixed upon the present form, by which the widest spread of brilliancy was obtained. When the diamond was exhibited at the Crystal Palace it weighed 186 carats and 1-16; its present weight, reduced by cutting, was 122 carats 3 qrs. and 1-10. The Persian diamond weighed 130 carats and the great Russian diamond 193 carats. a nucleus collected, which nucleus continued to gather to itself matter from the gaseous mass, till it became the of a fragment of this diamond, now in Persia, which cor-

and the great Russian diamond 193 carats. After giving a description of the method of cutting dia-monds and the plan adopted for cutting the Koh-i-moor, ombinations of actions came about, which gave different an interested spectator of the operation, and was a frequent visiter during its progress. It was finished in September, 1852, and occupied thirty-eight days in cutting. Diamonds were usually reduced to one-half their weight in cutting; and he gave the exact weight of the Koh-iveloped—vegetables with their power of growth and liability to decay, and animals with their springs of life and their seeds of death.

Again, the Sun is the source of all these. He has acted in the up-building of the majestic Earth, has brought to her beauty and life and sladness. The same Sun will be her beauty and life and sladness. The same Sun will be her beauty and life and sladness. her beauty and life and gladness. The same Sun will be submitted to public auction, only fetched rather more the agent for the Earth's overthrow. "His heat, falling than £7,000. He was sorry to find that so little atten-

ninosity when put in a dark place? He wished t luminosity when put in a dark place? He wished to know whether this was a mere nursery tale or not.

Prof. Tennant observed that it did retain this luminous quality or phosphorescence, as all diamonds did, for a few minutes probably; smaller ones also possessed this property in proportion to their size and brilliancy. A lump of crystallized sugar, also, exposed to the sun's rays, would show the same brilliant hues, if immediately

afterwards placed in the dark, as a diamond.

RAILROADS.—A paper was read the Mechanical Section by Mr. McDermort, the object of which was to explain an invention by means of which the same power that is employed in propelling or drawing a train of cars might be made subservient when required for arresting its progress; or, in other words, to employ the force of steam in the boiler of the engine for the purpose of acting, when required, on the breaks of the carriages attached.

The invention consists of two parts—first, an apparatus for applying any of the existing breaks to each and every carriage of a train; and, secondly, to the means of counceting or disconnecting the apparatus between the several carriages composing such train. The contrivance is thus explained:

With respect to the first portion of the invention, is

With respect to the first portion of the invention, is will be readily understood that on the surface of the wa-ter in a locomotive boiler there is a pressure of steam stances, at pleasure. Having thus a source of power at our disposal, it remains to consider how this power may be applied. The inventor proposes the following ar-

instead of being merely a continuous tube, it is made to enter at one side of a cylinder placed in a convenient position under the carriage or wagon and out at the other side, making the cylinder a part of the tube. To this cylinder, which it was proposed to make of four and a half inches diameter and three inches stroke, was fitted a solid piston or plug. The tube entered below the piston into the cylinder; the pressure from the boiler was turned on at a force of say 100 lbs. to every square inch in the cylinder. The area of the cylinder is 15.904 less the piston rod; we have therefore an effective pressure of piston rod; we have therefore an effective pressure of 1,500 lbs. to act upon the piston. As the piston is driven and, being connected with the levers of the ordinary breaks, they are at once brought into contact with the periphery of each wheel, and are kept there as long as the tube remains in communication with the boiler. In this case, therefore, we obtain a power equal to 1,500 altogether any mention of the increased power which would be obtained by the leverage attached to the breaks, as it has been found in practice that sufficient power may be obtained at once by this direct action. The inventor proposes that there shall be a tube and cylinder under every carriage or wagon of a train. At present, however long the train, only two or three of the carriages have breaks, simply because, as each break requires a man to work it, a multiplicity would be too expensive; but, how-ever numerous the breaks under the proposed system, the engine-driver, by turning a cock, acts upon the whole of

them in a moment.

Again: At present the engine-driver, on perceiving danger, has to signal the guard by whistling, and the guard, upon hearing the signal, has to commence screwing on his break. Meanwhile time has elapsed and the train has travelled an enormous distance towards the object of the whole of the breaks are applied to the wheels with-out the slightest shock to the train. By the adoption of

reduced.

Under the present system, the breaks being so few in number and the wheels being completely looked when the train is required to be stopped, both the rails and the wheels suffer, the latter being worn flat, whereas by the proposed breaks, and owing to their multipliesty, the wheels may be allowed sleafly to recase and thus avoid lejury.

With respect to the question of expense, it is estimated that the cost of adopting the tubes and cylinders to each carriage will not exceed from £4 to £5.

Hitherto the subject has presented no difficulties; we have merely exercised a knowledge of well-known physical laws for the purpose of producing motion in a cylin-

which has spring the matter which composes the Earth, as well as that composing the other bodies of the solar system. This matter was originally in the gaseous form. By an action among its particles—an action brought with it from its source, and which may be likened to that now employed in producing rain, snow, aerolites, and such—services and such—services are not required to be brought into use there will be no pressure upon the water in the tube, it being merely a column of inert fluid. By placing a small force that now employed in producing rain, snow, aerolites, and such—services are not required to be brought into use there will be no pressure upon the water in the tube, it being merely a column of inert fluid. By placing a small force that now employed in producing rain, snow, aerolites, and such—services are not required to be brought into use there will be no pressure upon the water in the tube, it being municate with the engine-driver. At the time when the "breaks" are not required to be brought into use there will be no pressure upon the water in the tube, it being municate with the engine-driver. At the time when the "breaks" are not required to be brought into use there will be no pressure upon the water in the tube, it being municate with the engine-driver. At the time when the "breaks" are not required to be brought into use there will be no pressure upon the water in the time. The substitute of the substitute of

sion be happy to submit it to the inspection of en and others who may feel an interest in the suc and others who may feel an interest in the successful carrying out of an invention which promises to afford a safeguard against those numerous collisions the sad results of which have so frequently been forced upon the attention of the public. The inventor, Mr. Ezna Miles, having exhibited to the meeting one of the joints and cylinders constructed on the above plan—

Mr. Roberts, C.E., said that he considered the invention as one well calculated to effect the object desired, and that the mode suggested, of bringing a train to a stand-still while the wheels were permitted to rotate, was a great improvement upon the existing plan of locking the wheels.

Mr. Dagleish, C.E., concurred in the opinion expre

rusted that energetic measures would be taken for carreing it into practical effect.

Mr. Kennedy, C.E., considered the mode proposed for

connecting the tube by means of a joint of so si and effective a character as that shown to the me than £7,000. He was sorry to find that so little attention had been paid to the means of testing diamonds, and instanced a ring which was recently purchased in Regent street, London, for £200, which proved to be two pieces of rock crystal, with an intermediate insertion of colored glass. In many of our watering-places the gentry were imposed upon by parties selling pieces of glass, which they represented to be sapphires picked up on the beach.

In reply to a question Prof. Tennant said that most of the English jewellers had been accustomed to out small stones; and it was not deemed advisable to permit any one to operate upon so valuable a diamond but those who had been experienced in cutting large gems.

Mr. Lews inquired if it were true that the Koh-i-noor, after being exposed to the rays of the sun, retained its